

Wencon physical properties - S.I metrics system

	Wencon Cream	Wencon Rapid	Wencon Coating white+blue	Wencon Hi-Temp yellow+green	Wencon Putty	Wencon Pipe Tape	Wencon Exhaust Repair kit	Wencon UW Cream	Wencon UW Coating orange+brown	Wencon UW Putty	Wencon Ceramic Cream	Wencon Ceramic Coating grey+green
Max. Temperature	+60 - +250°C	+60 - +250°C	+60 - +250°C	+160 - +300°C	+60 - +250°C	+120°C	Up to +1300°C (2400°F)	+60 - +160°C	+60 - +160°C	+60 - +95°C	+200 - +300°C	+220 - +320°C
Consistency	paste	paste	fluid	fluid	putty		fluid	paste	fluid	putty	paste	fluid
Mixing ratio vol.	1:1	1:1	1:2	1:2	-		No mixing. Just stir content before use	1:2	1:2	1:1	1:2	1:2
Apply with	spatula	spatula	spatula/brush	spatula/brush	hand/spatula	hand	see prod. Info.	spatula	spatula/brush	hand/spatula	spatula	spatula/brush
Potlife at 20 C.	30-60 min. Mixed in small amounts	10-20 min. mixed in small amounts	20-30 min. mixed in small amounts	20-40 min. mixed in small amounts	3-6 min. mixed in small amounts	4-6 min.		25-30 min. mixed in small amounts	25-35 min. mixed in small amounts	25 minutes	30-40 min. mixed in small amounts	20-30 min. mixed in small amounts
Curing time	10 - 15 hrs	40 - 90 min.	10 - 15 hrs	10 - 24 hrs	10 - 20 min.	10 - 30 min.	Initial curing 3-4 hrs	10 - 18 hrs	10 - 18 hrs	10 - 18 hrs	10 - 15 hrs	10 - 15 hrs
Machinability	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes	yes
Hardness shore D	75	81	80	82	85	N/A	N/A	79	79	76	80	81
Tensile strength Rcrack	14,30 N/mm ²	9,20 N/mm ²	12,90 N/mm ²	13,80 N/mm ²	4,60 N/mm ²	172 N/mm ²	N/A	35,80 N/mm ²	37,50 N/mm ²	17,6 N/mm ²	25,80 N/mm ²	25,40 N/mm ²
Compressive strength Rcrack	58 N/mm ²	112 N/mm ²	95 N/mm ²	96 N/mm ²	35,14 N/mm ²	180 N/mm ²	N/A	134 N/mm ²	133 N/mm ²	25,30 N/mm ²	65,10 N/mm ²	124 N/mm ²
Compr.strength modulus of elasticity	1.689 N/mm ²	2.891 N/mm ²	2.199 N/mm ²	4.284 N/mm ²	NA		N/A	2.631 N/mm ²	3.117 N/mm ²	3.400 N/mm ²	2.799 N/mm ²	3.030 N/mm ²
Shear adhesion *	14,40 N/mm ²	20 N/mm ²	16,20 N/mm ²	22,40 N/mm ²	4,50 N/mm ²	19 N/mm ²	N/A	33 N/mm ²	31,90 N/mm ²	15,90 N/mm ²	30,80 N/mm ²	28,90 N/mm ²
Adhesion to steel **	>3,0 N/mm ²	2,0 N/mm ²	6,0 N/mm ²	3,4 N/mm ²	>4,5 N/mm ²		N/A	>7,5 N/mm ²	>7,5 N/mm ²	>6,5 N/mm ²	6,7 N/mm ²	4,5 N/mm ²
Specific volume	775 cm ³ / kg	709 cm ³ / kg	730 cm ³ / kg	680 cm ³ / kg	500 cm ³ / kg		330 cm ³ / kg	526 cm ³ / kg	535 cm ³ / kg	556 cm ³ / kg	538 cm ³ / kg	658 cm ³ / kg
Heat resistance												
Corrosion	60°C (140°F)	60°C (140°F)	60°C (140°F)	160°C (320°F)	60°C (140°F)	120°C (248°F) peak 190°C (374°)		60°C (140°F)	60°C (140°F)	60°C (140°F)	200°C (392°F)	220°C (428°F)
Light or no load	120°C (248°F)	120°C (248°F)	120°C (248°F)	220°C (430°F)	120°C (248°F)			100°C (212°F)	100°C (212°F)	95°C (199°F)	250°C (482°F)	260°C (500°F)
For filling only	250°C (482°F)	250°C (482°F)	250°C (482°F)	300°C (570°F)	250°C (482°F)			160°C (320°F)	160°C (320°F)	95°C (199°F)	300°C (572°F)	320°C (608°F)
Dielectric strength	10 KV/mm	10 KV/mm	10 KV/mm	10 KV/mm	N/A	N/A		10 KV/mm	10 KV/mm	N/A	N/A	10 KV/mm

Hardness	Shore D, DIN 53505
Tensile strength	N/mm ² (10kg/cm ²) DIN 53454
Compressive strength	N/mm ² DIN 53454
Shear adhesion *	Single-lap-joint acc. to ASTM D1002
Adhesion to steel **	N/mm ² (10kg/cm ²) / ISO 4624
Specific volume	cm ³ per kilogram